

ABSTRACT

A routing table generating unit that generates a routing table describing a next hop to which a packet is to be sent according to a destination address of the packet that is input via an input channel, including a ternary content addressable memory (TCAM); an external memory; a unit that classifies items in information that is received; and a unit that stores an item that uniquely identifies the information among the classified items in the TCAM and stores the rest of the items to the external memory.